

AMENDMENTS TO THE SPECIFICATION

Please amend the heading on page 1, line 3 as follows:

~~Field of the Invention~~ **BACKGROUND**

Please delete the heading on page 1, line 7 as follows:

~~Related Art~~

Please replace the paragraph on page 1, lines 8-12 with the following:

Heretofore, there has been known a technology in which there is provided a variable valve control apparatus constituted to successively vary a valve lift amount of an intake valve, and a valve. A so-called non-throttle control is performed for controlling an intake air amount so as to obtain an optimum engine torque according to operating conditions (Japanese Unexamined Patent Publication No. 2001-182563).

Please replace the paragraphs on page 1, lines 18-29 with the following:

However, if the response to the operation of accelerator is too quick, the engine behaves in response to even a small operation of accelerator. Therefore, at the sudden starting/accelerating-time or time (or at the time of when a driver who is inexperienced in driving operates the accelerator, since accelerator), as the engine power is changed immediately in response to the operation of accelerator, it is impossible to obtain a good drivability ~~cooping with~~ that corresponds to a driver's request.

~~Summary of the Invention~~ SUMMARY

The present invention has been accomplished in view of the above problem, and has an object of enabling ~~to obtain~~ good drivability in an intake air amount control by an intake valve.

~~In order to~~ To achieve the above object, the present invention is constituted to change a control speed of an intake valve according to engine operating conditions.

Please replace the paragraph on page 2, lines 5-6 with the following:

Fig. 2 is a ~~cross-section~~ cross-sectional view ~~showing that shows~~ a variable valve event and lift mechanism (A-A cross section of Fig. 3).

Please replace the paragraphs on page 2, lines 11-14 with the following:

~~Fig. 6 is a cross-section view showing~~ Figs. 6A and 6B are cross-sectional views that show an operation of the variable valve event and lift mechanism at a low lift condition (B-B cross section view of Fig. 3).

~~Fig. 7 is a cross-section view showing~~ Figs. 7A and 7B are cross-sectional views that show an operation of the variable valve event and lift mechanism at a high lift condition (B-B cross section view of Fig. 3).

Please replace the paragraph on page 2, lines 22-25 with the following:

~~Fig. 12~~ Figs. 12A and 12B are graphs ~~showing that show~~ response characteristics of volume efficiencies in a throttle control and an intake valve control, in which ~~(A) shows Fig. 12A shows~~ the response characteristic at the time of low speed, and ~~(B) shows Fig. 12B shows~~ the response characteristic at the time of high speed.

Please amend the heading on page 2, line 28 as follows:

~~Preferred Embodiments~~ DETAILED DESCRIPTION

Please replace the paragraph on page 2, line 29 with the following:

~~Embodiment~~ Embodiments of the present invention will be described based on the drawings.

Please replace the paragraph on page 4, lines 17-20 with the following:

Eccentric cams 15, 15 are pressed and fixed to camshaft 13 via camshaft insertion holes 15c at outsides of valve lifters 19, 19, ~~respectively~~ respectively, so as not to interfere with valve lifters 19, 19. Also, outer peripheral surfaces 15d, 15d of cam body 15a are formed in the same cam profile.

Please replace the paragraph on page 5, lines 1-5 with the following:

Swing cam 20 is formed in a substantially lateral U-shape as shown in ~~Fig. 2, Fig. 6 and Fig. 7, and a~~ Figs. 2, 6A, 6B, 7A, and 7B. A supporting hole 22a is formed through a substantially ring-shaped base end portion 22. Camshaft 13 is inserted into supporting hole 22a to be rotatably supported. Also, a pin hole 23a is formed through an end portion 23 positioned at the other end portion 18c of rocker arm 18.

Please paragraph on page 5, lines 28-32 with the following:

In such a constitution, depending on a positional relation between the center axis P2 of control shaft 16 and the center axis P1 of control cam 17, as shown in the low lift L1 configuration shown in Fig. 6B and the high lift L2 configuration shown in Fig. 7B, the valve lift amount is ~~varied, and by~~ varied. By driving control shaft 16 to rotate, the position of the center axis P2 of control shaft 16 relative to the center axis P1 of control cam 17 is changed.

Please replace the paragraph on page 6, lines 16-18 with the following:

Here, the valve lift amount is decreased as the position of nut 124 approaches bevel gear 126, while the valve lift amount is increased as the position of nut 124 ~~gets away~~ moves away from bevel gear 126.

Please replace the paragraph on page 8, lines 10-20 with the following:

~~Fig. 12 shows~~ Figs. 12A and 12B show response characteristics of volume efficiencies in the throttle control and the intake valve control at the time of high speed ~~((A) in the figure (Fig. 12A))~~ and at the time of low speed ~~((B) in the figure (Fig. 12B))~~. As apparent from the ~~figure, since~~ figures, as the suction of the intake air of the amount for collector capacity into the cylinder finishes quickly at the time of high speed, the response characteristic to converge on the target volume efficiency in the throttle control is equivalent to that in the intake valve control. However, ~~since as~~ it requires a time time to suck the intake air of the amount for collector capacity into the cylinder at the time of low speed, the response characteristic in the throttle control is largely delayed to that in the intake valve control. In other words, the response in the intake valve control is too quick, to thereby degrade the drivability.

Please replace the paragraph on page 9, lines 8-10 with the following:

The proportional gain P ~~variably~~ is variably set based on the engine rotation speed N_e as described above, a constant integral gain I and a constant differential gain D set in blocks 14 and 15, respectively, are input to block 12.

Please replace the paragraph on page 9, lines 15-22 with the following:

Thus, the output of the controlled variable VELDUTY is set to be largely delayed by the proportional gain P, which is set to be small at the time of low speed, so as to delay the convergence on the target operating angle. Accordingly, as in the first embodiment, ~~since~~ as the output of the actually controlled operating angle VELCOM is largely delayed, the response characteristic closer to that in the throttle control can be ~~obtained~~, the obtained. As a result, a good drivability (starting or accelerating/decelerating ability) ~~cooping with that~~ corresponds to the driver's request can be ~~obtained, and also~~ obtained. Moreover, the operation of accelerator can be facilitated, ~~to improve thereby~~ improving the drivability during running.

Please replace the paragraph on page 9, lines 28-33 with the following:

Moreover, as shown in Fig. 14, the constitution may be such that a target intake air amount equivalent to the target torque is set based on the accelerator opening ACC and the engine rotation speed ~~Ne, and the~~ Ne. The target intake air amount is corrected to be delayed, so that the target operating angle is calculated based on the corrected target intake air amount. Thus, the lift amount control of intake valve can be performed finely.